EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER

02093406

PUBLICATION DATE

04-04-90

APPLICATION DATE

29-09-88

APPLICATION NUMBER

63245252

APPLICANT: NEC CORP;

INVENTOR:

UJI TOSHIO;

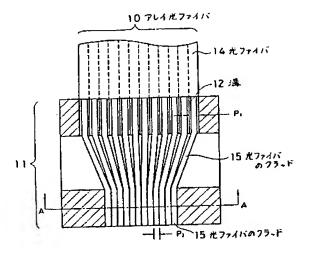
INT.CL.

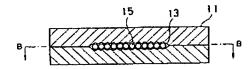
G02B 6/04 H04B 10/12

TITLE

TERMINAL OF ARRAYED OPTICAL

FIBER





ABSTRACT: PURPOSE: To obtain a small-sized and inexpensive optical module by providing a means of holding the terminals of plural optical fibers arrayed at specified intervals in parallel with each other to a flat plate shape by narrowing the spacings therebetween to the specified spacings smaller than the inter-fiber spacings.

> CONSTITUTION: The arrayed optical fibers 10 consist of 10 optical fibers 14. First grooves 12 of a pitch P₁ and second grooves 13 of a pitch P2 are formed by, for example, etching, to a silicon block 11. The pitch P₁ is set at 250µm equal to the pitch of the arrayed optical fibers 10 and the pitch P2 is set at, for example, 150μm. The pitch of the optical fibers 10 is determined by the diameter of the clads and the thickness of the coatings. The coating layers of 125µm exist between the cores of the respective optical fibers 14 of the arrayed optical fibers 10 if the diameter of the clads is 125μm. The spacings between the optical fibers can, therefore, be reduced down to 125µm by removing the coatings. The respective optical fibers 14 which constitute the arrayed optical fibers 10 are fixed into the first grooves 12 and the 2nd grooves 13 and the end faces of the 2nd grooves 13 of the silicon block 11 are polished to work the front ends of the optical fibers 14 to specular surfaces.

COPYRIGHT: (C)1990,JPO&Japio